desired result follows. As a corollary to this is the extension of the periodic physical examination to include the whole population. This has turned out to be an excellent investment for those insurance and industrial corporations that have adopted it. (4) The elimination, so far as possible, of the factors of fatigue and various intoxications from the industries.

A Report of 7637 Schick Tests for Immunity to Diphtheria Performed over a Period of One Year.—HUGHENS (*Bull. No.* 61, *Bureau of Med. and Surg.*, U. S. Navy Department, January 25, 1919) reports work covering the study of the Schick reaction in 7637 men chosen at random in the U. S. Naval Training Station, Great Lakes, Illinois, over a period of one year. He states that it would seem that an attack of diphtheria, or the administration of antitoxin as a prophylactic or curative measure, affords protection for only a short time. There seems to be good evidence that season influences susceptibility to diphtheria. It would appear that in February, March and April persons are more susceptible than at any other time during the year. The marks used were: For the minimum reaction "X," for the maximum "XXXX" and the degrees between the minimum and maximum "XX" and "XXX." The final reading of all tests was made seventy-two hours after the test was done. This reading of the degrees of reaction is, of course, an arbitrary one, and every worker must establish his own standard. It was shown that the increase in susceptibility occurred in those giving the three lesser reactions. It is evident that "X" men are on the borderline and are the ones that shift to negative in the more favorable seasons, and to "XX" increasing that class of susceptibles in the unfavorable seasons, some "XX" shifting to "XXX." Individuals shifted from negative to positive tests during the months of February, March and April, which is very suggestive that all persons become more susceptible during those months.

The Function of Fats in Immune Processes: II. Pneumococcus and Streptococcus Immunity.—The work discussed in WARDEN's paper (*Jour. Infect. Dis.*, March, 1919, 285–296) is a continuation of earlier work (*Jour. Infect. Dis.*, 1918, xxii, 131), in which it was shown that the fats peculiar to certain bacteria and other cells constitute their specific antigens, as shown by complement-fixation, antibody production in animals inoculated with the antigens, and by a new specific precipitation reaction *in vitro* between the fat antigens and their appropriate serum antibodies. This paper deals with the quantity of antibody produced in rabbits from inoculations with the pneumococcus and the streptococcus fat antigens and the amount of protection afforded against the organisms. The facts brought out in the work on the functions of antigenic fats in immunity lead one to believe that such antigens are destined to play an important part not only in active immunization of animals and man as a prophylactic measure, but also in the treatment of infections. They have to commend them their purity, the dosage by weight, the absence of toxicity, the ease and safety of either subcutaneous or intravenous administration. This form of treatment would appear to be particularly applicable to the types of infections of acute and often fatal character and of brief duration where antibody production is invariably slight or absent altogether, and where toxemia is the dominant symptom, such types being represented by pneumococcus and meningococcus infections. In infections also of a more prolonged course, such as typhoid and paratyphoid fevers, even when antibody is known to be present in the serum, as shown by agglutination tests, at the same time with the antigenic microörganism, the fat antigen would be presumed to be beneficial both by increasing the antibody production and by furnishing a nidus round which the antigen-antibody aggregate might form and lead to the absorption of complement.

Droplet Infection and Its Prevention by the Face Mask.—WEAVER (*Jour. Infect. Dis.*, March, 1919, 218–229) states that droplet infection comes into play whenever an indvidual with pathogenic organisms in the mouth gets into close contact with another individual. Sneezing and suppressed coughing are most apt to produce abundant droplet spray. Gauze will filter bacterial spray from air. Its efficiency is in direct proportion to the fineness of mesh and number of layers employed. Three layers of gauze with a mesh of forty threads or more will remove almost all bacteria-carrying droplets. Occasional fine droplets pass through. Gauze masks appear from clinical data to prevent infection through mouth droplets. They are useful when worn for protection by attendants on the sick, and also when worn by the infected individual to prevent contamination of his surroundings. The use of masks should not lead to neglect of measures calculated to prevent transfer of infectious materials by other means than droplet spray.

Chlorinated Lime and Halazone in the Disinfection of Drinking Water.—FANTUS (*Jour. Infect. Dis.*, March, 1919, No. 3, xxiv, 191–203) states that the desirability of possessing, in a convenient and readily portable form, a reliable disinfectant for small quantities of water, such as might be carried in a soldier's drinking bottle, has led DAKIN and DUNHAM (*British Med. Jour.*, 1916, i, 160; 1917, i, 682; also AM. JOUR. MED. SC., 1917, cliv, 181) to advocate p-sulphonedichloraminobenzoic acid ($Cl_2N.O_2S.C_6H_4.COOH$), under the name of halazone, as the best agent they were able to find, suitable for this purpose. The work undertaken by Fantus was chiefly to compare the value of this new agent with that of chlorinated lime. He found chlorinated lime to be a more efficient water disinfectant than halazone, compared on the basis of active chlorin. It is, of course, also a great deal cheaper. Hence there is no reason for employing halazone in water disinfection, excepting when its superior tablet-making qualities render its use advantageous. Halazone is the better agent for the preparation of water disinfecting tablets. Its action is, however, a rather slow one.

Notice to Contributors.—All communications intended for insertion in the Original Department of this JOURNAL are received only *with the distinct understanding that they are contributed exclusively to this* JOURNAL.

Contributions from abroad written in a foreign language, if on examination they are found desirable for this JOURNAL, will be translated at its expense.

A limited number of reprints in pamphlet form, if desired, will be furnished to authors, *providing the request for them be written on the manuscript.*

All communications should be addressed to—

DR. GEORGE MORRIS PIERSOL, 1913 Spruce St., Philadelphia, Pa., U. S. A.